CLAIMS.

1. A bioabsorbable soft tissue implant material for filling and closing soft-tissue cavities the implant material comprising a biologically-compatible in-growth matrix having interstices therein, wherein the interstices have dimensions effective to permit soft tissue to grow therein and wherein the matrix comprises a crosslinked collagen-glycosaminoglycan composite containing at least about 0.5% by weight glycosaminoglycan.

2. The implant of claim 1wherein the interstices comprise between about 40 and about 60 percent of the implant material.

3. The implant of claim 1 wherein the interstices have a size of less than about 100 microns.

4. The implant of claim 1 wherein the collagen comprises between about 30% and about 94% of the implant material by weight.

5. The implant of claim 4 wherein the glycosaminoglycan is present in an amount sufficient to provide between about 6 percent and about 15 percent, by weight, of the collagen-glycosaminoglycan product.

6. The implant of claim 5 wherein the glycosaminoglycan is selected from the group consisting of hyaluronic acid, chondroitin 6-sulfate, chondroitin 4-sulfate, heparin, heparan sulfate, keratan sulfate, dermatan sulfate, chitin, and chitosan.

7. The implant of claim 5 wherein the glycosaminoglycan is chondroitin 6-sulfate.

8. The implant of claim 1, wherein the implant self expands to conform to the tissue void when in contact with body fluid.

9. The implant of claim 1, wherein the implant is of any geometrical shape.

10. The implant of claim 1, wherein the implant is a sheet having an overall thickness of from about 25 to about 100 mils.

11. The implant of claim 1 wherein the crosslinking is covalent crosslinking.

12. The implant of claim 1 wherein the in-growth matrix further comprises a synthetic material.

13. The implant of claim 1 wherein the synthetic material comprises a hydrogel.

14. The implant of claim 1 wherein the in-growth matrix further comprises at least one bioactive substance.

15. The implant of claim 14 wherein the bioactive substance is selected from the group consisting of an analgesic, an anesthetic, an antimicrobial compound, an antibody, an anticoagulant, an antifibrinolytic agent, an anti-inflammatory compound, an antiparasitic agent, an antiviral compound, a cytokine, a cytotoxin or cell proliferation inhibiting compound, a chemotherapeutic drug, a hormone, an interferon, a lipid, an oligonucleotide, a polysaccharide, a protease inhibitor, a proteoglycan, a polypeptide, a steroid, a vasoconstrictor, a vasodilator, a vitamin, a mineral, a growth factor, a cell attachment factor, a chemotactic factor, an angiogenic factor and an enzyme.

16. The implant of claim 14 wherein the at least one bioactive substance is a growth factor.

17. The implant of claim 16 wherein the growth factor is selected from the group consisting of VEGF, bFGF, PDGF, and combinations thereof.

18. The implant of claim 1 wherein the in-growth matrix comprises between 2 and 8 layers.

19. The implant of claim 1 wherein the in-growth matrix further comprises a radio-opaque material.

20. A method of filling and closing soft-tissue cavities using bioabsorbable soft tissue implant material comprising a biologically-compatible in-growth matrix having interstices therein, wherein the interstices have dimensions effective to permit soft tissue to grow therein and wherein the matrix comprises a crosslinked collagen-glycosaminoglycan composite containing at least about 0.5% by weight glycosaminoglycan.

21. The method of claim 20 wherein the interstices comprise between about 40 and about 60 percent of the implant material.

22. The method of claim 20 wherein the interstices have a size of less than about 100 microns.

23. The method of claim 20 wherein the collagen comprises between about 30% and about 94% of the implant material by weight.

24. The method of claim 23 wherein the glycosaminoglycan is present in an amount sufficient to provide between about 6 percent and about 15 percent, by weight, of the collagen-glycosaminoglycan product.

25. The method of claim 24 wherein the glycosaminoglycan is selected from the group consisting of hyaluronic acid, chondroitin 6-sulfate, chondroitin 4-sulfate, heparin, heparan sulfate, keratan sulfate, dermatan sulfate, chitin, and chitosan.

26. The method of claim 25 wherein the glycosaminoglycan is chondroitin 6-sulfate.

27. The method of claim 20, wherein the implant self expands to conform to the tissue void when in contact with body fluid.

28. The method of claim 20, wherein the implant is of any geometrical shape.

29. The method of claim 25, wherein the implant is a sheet having an overall thickness of from about 25 to about 100 mils.

30. The method of claim 25 wherein the crosslinking is covalent crosslinking.

31. The method of claim 25 wherein the in-growth matrix further comprises a synthetic material.

32. The method of claim 31 wherein the synthetic material comprises a hydrogel.

33. The method of claim 25 wherein the in-growth matrix further comprises at least one bioactive substance.

34. The method of claim 33 wherein the bioactive substance is selected from the group consisting of an analgesic, an anesthetic, an antimicrobial compound, an antibody, an anticoagulant, an antifibrinolytic agent, an anti-inflammatory compound, an antiparasitic agent, an antiviral compound, a cytokine, a cytotoxin or cell proliferation inhibiting compound, a chemotherapeutic drug, a hormone, an interferon, a lipid, an oligonucleotide, a polysaccharide, a protease inhibitor, a proteoglycan, a polypeptide, a steroid, a vasoconstrictor, a vasodilator, a vitamin, a mineral, a growth factor, a cell attachment factor, a chemotactic factor, an angiogenic factor and an enzyme.

35. The method of claim 33 the at least one bioactive substance is a growth factor.

36. The method of claim 35 wherein the growth factor is selected from the group consisting of VEGF, bFGF, PDGF, and combinations thereof.

37. The method of claim 25 wherein the in-growth matrix comprises between 2 and 8 layers.